## **REMARKS**

Claims 2-18 and 20-60 remain in the application. Independent claims 16 and 27 are currently amended. The original application as filed supports these amendments. No new matter has been added. Claims 29-60 have been withdrawn from consideration. Claims 1 and 19 have been previously canceled. For the reasons set forth below, Applicant respectfully submits that claims 2-18 and 20-28 are now in condition for allowance.

## 1. Claim Rejections - 35 U.S.C.§102(b)

In paragraph 3 of the Office Action, Claims 2, 6, 10, 11, 16-18, 20, 22, 24, 27, and 28 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,347,239 ("Loehner"). Applicant has amended independent Claims 16 and 27 to more clearly define the architecture of the claimed invention. Specifically, the claimed invention includes a resistive array that has two or more input nodes, two or more output nodes, and a first set of two or more resistive devices. Each of the resistive devices of the first set couples <u>ONE</u> of the input nodes with an associated <u>ONE</u> of the output nodes. In other words, a direct exclusive path through a resistive device is formed between each input node and each output node.

Furthermore, the claimed invention also includes a second set of one or more resistive devices. Each resistive device of the second set couples one of the input nodes with another of the input nodes. In other words, a direct exclusive path through a resistive device is formed between any pair of adjacent input nodes. Loehner does not teach or suggest these architectural features of amended independent Claims 16 and 27. Nor does Loehner teach or suggest the combination of these features. Therefore the rejection lacks proper basis and should be reconsidered and withdrawn.

Claims 2, 6, 10, 11, 17, 18, 20, 22, 24, and 28 are dependent claims that depend directly or indirectly from amended independent Claims 16 or 27. Therefore these dependent claims are patentable for at least the same reasons described for amended independent Claims 16 and 27. Therefore the rejection of the dependent claims is also without proper basis and should consequently be reconsidered and withdrawn.

## 2. Claim Rejections - 35 U.S.C.§103(a)

In paragraph 4 of the Office Action, Claims 3-5, 7-9, 12-15, 21, 23, 25, and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Loehner. The rejected claims are all dependent claims, which depend directly or indirectly from amended independent Claims 16 and 27. Therefore these dependent claims are patentable for at least the same reasons described previously for amended independent Claims 16 and 27. Therefore the rejection of the dependent claims is also without proper basis and should consequently be reconsidered and withdrawn.

In addition, in paragraph 5 of the Office Action, the examiner cites but not rely upon references U.S. Patent No. 3,015,790, and U.S. Patent No. 1,975,709 as anticipating at least independent Claims 16 and 27. This assertion is without merit, because as with Loehner, neither reference teaches or suggests the unique architecture of the claimed invention as discussed above. Therefore, all of the cited prior art references fail to anticipate or obviate the claimed invention. Accordingly, Applicant requests reconsideration.

## **Conclusion**

On the basis of the foregoing amendments and remarks, Applicant respectfully submits that Claims 2-18 and 20-28 are in condition for allowance. Passage to issue is requested. If there are any questions regarding these amendments and remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

A Request for a Three (3) Month Extension of Time is included herewith.

Pursuant to 37 C.F.R. § 1.136(a)(2), the Examiner is authorized to charge any fee under 37 C.F.R. § 1.17 applicable in this instance, as well as in future communications, to Deposit Account 50-2678.

Furthermore, such authorization should be treated in any concurrent or future reply requiring a petition for an extension of time under paragraph 1.136 for its timely submission, as constructively incorporating a petition for extension of time for the appropriate length of time pursuant 37 C.F.R. § 1.136(a)(3) regardless of whether a separate petition is included.

The Commissioner is hereby authorized to charge payment of any additional fees associated with the filing submitted herewith or credit any overpayment to Deposit Account No. 50-2678.

Date: 5/15/06

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Respectfully submitted,

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